

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An electrical heating cable comprising at least two power supply conductors extending along the length of the cable and at least one heating element which extends along the cable and between the two conductors, and connected in parallel between the conductors, wherein at least one of the conductors is encased in a sheath of material which has a positive temperature coefficient and the heating element is in electrical contact with the outer surface of the sheath such that the sheath is electrically connected in series between each heating element and the conductor encased by the sheath.
2. (Original) An electrical heating cable according to claim 1, wherein said heating element comprises a heating wire which extends along the cable and between the two conductors so as to define a series of heating elements connected in parallel between the conductor.
3. (Previously Presented) An electrical heating cable according to claim 2, comprising a first conductor encased in a first sheath, a second conductor encased in a second sheath manufactured from a material with a positive temperature coefficient, a third sheath encasing the first and second sheaths, and a heating wire wound around the third sheath, portions of the third sheath being removed to cause the heating wire to contact the second sheath.
4. (Original) An electrical heating cable according to claim 3, wherein the first sheath is electrically insulating and is in contact with the second sheath, portions of the first and third sheaths being removed to cause the heating wire to contact the first conductor.
5. (Original) An electrical heating cable according to claim 1, wherein the heating element comprises a semi-conductor.
6. (Canceled)

7. (Previously Presented) An electrical heating cable according to claim 1, wherein the heating element comprises a material which has a positive temperature coefficient.
8. (Previously Presented) An electrical heating cable according to claim 7, wherein the positive temperature coefficient of the heating element and the positive temperature coefficient of the sheath of material are selected such that the cable is self-regulating up to a predetermined temperature at which it self-limits.
9. (Previously Presented) An electrical heating cable according to claim 1, wherein the heating element comprises a material which has a negative temperature coefficient.
10. (New) An electrical heating cable comprising:
 - two power supply conductors extending along the length of the cable, each conductor being encased in a sheath and at least one conductor being encased in a positive temperature coefficient (PTC) material sheath;
 - an insulation jacket encasing the conductors and sheaths, a first portion of the insulation jacket being removed to expose the outer portion of the PTC material sheath and a second portion of the insulation jacket being removed to expose the other conductor to electrical contact; and
 - a heating wire extending along the cable around the two conductors on the outside of the insulation jacket, and connected in parallel between the conductors such that the heating wire is in electrical contact with the exposed portion of the PTC material sheath, the heating wire remaining free of contact with the conductor encased in the PTC material sheath.
11. (New) The electrical heating cable of claim 10 further comprising:
 - one conductor being encased in a insulation material sheath, a portion of the insulation material sheath being removed to expose the encased conductor;
 - a second portion of the insulation jacket being removed to expose the exposed portion of the conductor encased in the insulation material sheath; and

the heating wire being in electrical contact with the exposed portion of the conductor encased in the insulation material sheath.

12. (New) The electrical heating cable of claim 10 further comprising:
 - each conductor being encased in a positive temperature coefficient (PTC) material sheath; and
 - the heating wire being in electrical contact with the exposed portion of the PTC material sheaths, the heating wire remaining free of contact with the conductors encased in the PTC material sheaths.
13. (New) The electrical heating cable of claim 11 wherein the heating wire comprises a constant wattage material.
14. (New) The electrical heating cable of claim 11 wherein the heating wire comprises a PTC material.
15. (New) The electrical heating cable of claim 11 wherein the heating wire comprises a negative temperature coefficient (NTC) material.
16. (New) An electrical heating cable comprising:
 - two power supply conductors extending along the length of the cable, at least one conductor being encased in a positive temperature coefficient (PTC) material sheath;
 - a semi-conductor heating element extending along the cable, the two conductors being embedded and completely surrounded by the semi-conductor heating element such that the semi-conductor heating element is in electrical contact with each conductor and remains free of contact with the each conductor encased in a PTC material sheath.
17. (New) The electrical heating cable of claim 16 wherein each conductor is encased in a PTC material sheath.

Appl. No. 10/521,835
Amdt. Dated May 3, 2007
Reply to Office Action of November 3, 2006

18. (New) The electrical heating cable of claim 16 wherein the semi-conductor heating element comprises a constant wattage material.
19. (New) The electrical heating cable of claim 11 wherein the semi-conductor heating element comprises a PTC material.
20. (New) The electrical heating cable of claim 11 wherein the semi-conductor heating element comprises an NTC material.